

OTHER JOURNALS IN BRIEF

A selection of abstracts of clinically relevant papers from other journals. The abstracts on this page have been chosen and edited by John R. Radford.

CLINICAL REPORT – ROOT FRACTURE

A novel treatment for propagated crown fractures

Michaelson PL. *J Endod* 2015; **41**: 130–134

An isolated pocket is indicative of a root fracture, but does such heroic treatment regenerate lost periodontal ligament?

A tooth that has been root treated should receive a restoration incorporating cuspal coverage and, it is suggested, a ferrule. A recent high quality paper (*J Dent Res* 2014; **93**(7 suppl): 52S–58S) was not cited; it reported residual coronal tooth structure (including the ferrule characteristic) 'did not significantly influence the failure risk' when restoring endodontically treated premolars. In this clinical report, the treatment of three patients is described, all of whom experienced symptoms after root canal therapy. Of note, it appeared on radiographic examination that, all these root treated teeth had received cuspal coverage restorations. Resolution of symptoms was achieved by surgical removal of the fractured portion of the root, sealing of the exposed previously obturated root canal with MTA and then restoring the fractured root with resin composite. Two patients, received topical application of minocycline with remarkable reductions in probing depth measurements and absence of bleeding on probing.

DOI: 10.1038/sj.bdj.2015.260

CLINICAL REPORT – ONLAY DENTURE

Overlay removable denture for treatment of worn teeth

Beyth N, Tamari I *et al. Spec Care Dentist* 2014; **34**: 295–297

'...simple and noninvasive treatment.'

This paper describes the dental reconstruction of two patients with gross tooth wear. For one patient, this was achieved using a PMMA removable prosthesis and for the other, modification of an existing metal-based prosthesis. This treatment approach was apposite as the patients' medical histories contra-indicated crown-lengthening, or tooth extractions. One patient had received radiation therapy for cancer of the tongue and the other was being treated for ischaemic heart disease. The patient who had received radiotherapy, was given advice on meticulous home oral care and following prosthetic reconstruction, the use of an adjunctive fluoride preparation using the removable prosthesis as a delivery vehicle. It was reported for this patient only, that the PMMA prosthesis survived for one year, despite the inevitable unfavourable occlusal forces. Although the authors placed emphasis on possible TMD symptoms as a consequence of increasing the occlusal vertical dimension, no such symptoms were experienced. Although not cited, the treatment of the second patient mirrored that described in the classic paper outlining the modification of an existing denture to an onlay prosthesis (*J Prosthet Dent* 2002; **87**: 1–4).

DOI: 10.1038/sj.bdj.2015.261

CLINICAL REPORT – VENEERS

Esthetic, occlusal, and periodontal rehabilitation of anterior teeth with minimum thickness porcelain laminate veneers

da Cunha LF, Pedroche LO *et al. J Prosthet Dent* 2014; **112**: 1315–1318

'...minimum thickness glass ceramic veneers for worn anterior teeth with multiple diastemas.'

The authors suggest that pressed ceramic laminate veneers 1) can be provided with little or no tooth preparation, 2) will allow trial cementation in order to share information with the patient as to their definitive appearance, and permit the dentist to verify their elected occlusal scheme, and 3) will achieve optimum dental aesthetic and mechanical characteristics. In this report, veneers were fabricated with a lithium disilicate core (IPS e.max® Press; Ivoclar Vivadent) and an aesthetic veneer of feldspathic porcelain. Previously, the patient had received composite resin restorations. The authors suggested that these were sub-optimal. Removal of the resin composites was carried out expertly. No tooth preparation was required to accommodate these laminate veneers, but the teeth were diminutive. The trial restorations, only partly illustrated in this paper, appeared unsatisfactory and added little to the process of consent. The definitive restorations were possibly 'overstated' with exaggerated incisal translucency and the buccal surface of 22 was over-contoured.

DOI: 10.1038/sj.bdj.2015.262

TOOTH WEAR – OCCLUSAL CONFIGURATIONS

Occlusal wear and occlusal condition in a convenience sample of young adults

Van't Spijker A, Kreulen CM *et al. J Dent* 2015; **43**: 72–77

In this longitudinal study, those with anterior protected occlusion showed less tooth wear, particularly of the premolar teeth.

Cross-sectional studies are not able to establish the direction of association between tooth wear and an occlusal scheme. This study compared data recorded at baseline and after 3 years, in a convenience sample of 28 dental students. Disclusion was identified by the use of 12 µm polyethylene foil (Shim Stock, Hahnel). Tooth wear was recorded on a flatbed scanner using dental casts. Regression analysis was used to look for associations between tooth wear and different occlusal configurations, 'spatial relationship of anterior teeth', 'history of orthodontic treatment' and 'self-reported grinding/clenching'. There was less overall tooth wear in those subjects who had anterior guidance compared with group function. Counterintuitively, those who reported grinding/clenching of their teeth did not show increased tooth wear. This study used a semi two-dimensional method to measure wear assessment. It was conceded that this method, as opposed to a three-dimensional method, has particular shortcomings when measuring wear of incisor teeth.

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